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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,301	10/30/2001	Jeffrey T. Kohli	SP01-284	7281
22928	7590	12/01/2003	EXAMINER	
CORNING INCORPORATED SP-TI-3-1 CORNING, NY 14831			SAMPLE, DAVID R	
			ART UNIT	PAPER NUMBER
			1755	7
DATE MAILED: 12/01/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application N .	Applicant(s)	
	10/016,301	KOHLI, JEFFREY T.	
<b>Period for Reply</b>	Examiner	Art Unit	
	David Sample	1755	
<b>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</b>			
<b>A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.</b>			
<ul style="list-style-type: none"> <li>- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</li> <li>- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>			
<b>Status</b>			
<p>1)<input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>June 23, 2003</u>.</p> <p>2a)<input type="checkbox"/> This action is <b>FINAL</b>.      2b)<input checked="" type="checkbox"/> This action is non-final.</p> <p>3)<input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213.</p>			
<b>Disposition of Claims</b>			
<p>4)<input checked="" type="checkbox"/> Claim(s) <u>1-26</u> is/are pending in the application.</p> <p>4a) Of the above claim(s) _____ is/are withdrawn from consideration.</p> <p>5)<input checked="" type="checkbox"/> Claim(s) <u>18-22 and 24</u> is/are allowed.</p> <p>6)<input checked="" type="checkbox"/> Claim(s) <u>1-4,7-17,23,25 and 26</u> is/are rejected.</p> <p>7)<input checked="" type="checkbox"/> Claim(s) <u>5 and 6</u> is/are objected to.</p> <p>8)<input type="checkbox"/> Claim(s) _____ are subject to restriction and/or election requirement.</p>			
<b>Application Papers</b>			
<p>9)<input type="checkbox"/> The specification is objected to by the Examiner.</p> <p>10)<input type="checkbox"/> The drawing(s) filed on _____ is/are: a)<input type="checkbox"/> accepted or b)<input type="checkbox"/> objected to by the Examiner.</p> <p style="margin-left: 20px;">Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).</p> <p style="margin-left: 20px;">Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</p> <p>11)<input type="checkbox"/> The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</p>			
<b>Priority under 35 U.S.C. §§ 119 and 120</b>			
<p>12)<input type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</p> <p>a)<input type="checkbox"/> All    b)<input type="checkbox"/> Some *    c)<input type="checkbox"/> None of:</p> <p>1.<input type="checkbox"/> Certified copies of the priority documents have been received.</p> <p>2.<input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____.</p> <p>3.<input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</p> <p>* See the attached detailed Office action for a list of the certified copies not received.</p> <p>13)<input type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.</p> <p>a)<input type="checkbox"/> The translation of the foreign language provisional application has been received.</p> <p>14)<input type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.</p>			
<b>Attachment(s)</b>			
<p>1)<input type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2)<input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3)<input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u>.</p>		<p>4)<input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .</p> <p>5)<input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6)<input type="checkbox"/> Other: _____</p>	

**DETAILED ACTION**

Any rejections and/or objections, made in the previous Office Action, and not repeated below, are hereby withdrawn.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 103***

Claims 1-4, 7-17, 23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al. (JP 09249430).

Maeda '430 discloses a glass composition, which is believed to have overlapping ranges of components with the glass of instant claims 1, 9-17, 23 and 25. See the translated abstracts, and paragraph [0007]. It is noted that the reference discloses a glass composition in weight percent whereas the instant claims describe the glass in mole percent. This discrepancy makes it difficult to compare the reference and the claims. However, the examiner has formulated a theoretical composition which has amounts of components in weight percent and mole percent that fall within the ranges of the claims and the ranges disclosed by the reference:

	Mol%	Wt%
MgO	0.0	0%
CaO	9.0	8%
SiO <sub>2</sub>	65.0	58%
Na <sub>2</sub> O	8.5	7.9%
K <sub>2</sub> O	2.5	3.5%
Al <sub>2</sub> O <sub>3</sub>	15.0	23%
SrO	0.0	0%
BaO	0.0	0%

This theoretical composition is evidence that the glass of the reference has overlapping ranges of components with the glass of the present invention. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

The reference fails to disclose the liquidus temperature, the viscosity at the liquidus temperature or the strain temperature described by instant claims 2-4, 7, 8. However, a glass's properties are determined by its composition, and the composition of the reference has overlapping ranges of components with the composition of the instant claims. Therefore, one of ordinary skill in the art would expect that the glass of the reference would have the claimed properties.

#### ***Response to Arguments***

Applicant's arguments filed June 23, 2003 have been fully considered but they are not persuasive with respect to the rejection over JP '430.

Applicants assert that none of the examples in Maeda '430 fall within the claimed compositional ranges when converted to mole percent. The examiner agrees. However, a reference is not limited to its examples alone for disclosure, but must be viewed in its entirety to determine what would have been obvious to one of ordinary skill in the art. In the present instance, the compositional ranges of the reference overlap the presently claimed ranges, which has been held to establish *prima facie* obviousness.

Applicants point out that the theoretical composition recited in the first action (Paper No. 3) does not fall within the presently claimed ranges. Applicants are certainly correct, and

because of this error, the present action is **NONFINAL**. However, it should be noted that the theoretical composition recited above does fall within the ranges of the reference and the claims.

***Allowable Subject Matter***

Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 18-22 and 24 are allowed.

The prior art fails to disclose or suggest a glass having the recited composition and which also exhibits a thermal expansion of  $80$  to  $95 \times 10^{-7}/^{\circ}\text{C}$  over a range from  $25$  to  $300^{\circ}\text{C}$ .

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Sample whose telephone number is (703)308-3825 (and which will be (571)272-1376 after December 23, 2003). The examiner can normally be reached on Monday to Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on (703)308-3823 (and which will be (571)272-1362 after December 23, 2003). The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)872-9311 for After Final communications.

Art Unit: 1755

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.



David Sample  
Primary Examiner  
Art Unit 1755

DRS

November 28, 2003